# Sheep Creek Vegetation Management Project Visuals and Scenery Report

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Prepared by:

/s/ Bríanna Carollo

Brianna Carollo La Grande Ranger District NEPA Planner Wallowa-Whitman National Forest

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## **Visuals / Scenery Resources**

## **Executive Summary**

The no action alternative would not address the vegetation conditions that are the beyond the historic range of variability. Alternative 1 would not reduce the risk of uncharacteristic wildfire that could cause undue effects to scenery, nor will it move the stands toward desired conditions.

Alternatives 2 and 3 would move stands toward desired future conditions consistent with historic range of variability, and reduce the risk of uncharacteristic fire, while maintaining scenic integrity and meeting forest plan standards. By moving stand conditions toward the historic range of variability, the area will be more resilient to changes in climate with drier and warmer conditions.

The vegetation management objectives would be achieved without creating unnatural appearing forms, lines or colors through unit layout following natural vegetation patterns and incorporation of variable spacing/density and low-cut stumps during thinning activities. The selective thinning would create small openings similar to existing natural openings in the area, maintaining retention visual quality objectives (VQO) of the Wallowa-Whitman National Forest plan.

Table 1. Comparison of Effects by Alternative for Visual Quality Objective and Scenic Stability

Scenery Elements	Alternative 1	Alternative 2	Alternative 3
Partial Retention	Meets VQO	Meets VQO	Meets VQO
Modification	Meets VQO	Meets VQO	Meets VQO
Overall Project Area Existing Condition is Very Low Stability	No improvement	Improves to High Stability	Improves to High Stability
Ponderosa Pine	No improvement	Improves to High stability	Improves to High Stability
Ponderosa Pine/Mixed Conifer No improvement		Improves to High Stability	Improves to High Stability

## Introduction

Scenery provides the setting for all activities experienced by forest visitors. Each setting is comprised of scenic attributes derived by the environmental context of topography, geology, and climate. These underlying factors are expressed and highlighted by the scenic attributes they support. Scenery, just as any other resource, must be cared for and managed for future generations. The activities proposed by the Sheep Creek Project affect the current and future condition of these valued scenic resources. Managing scenery resources involves the process of analyzing effects, implementing scenic character goals and applying scenic conservation project design features to achieve the WWNF Land and Resource Management Plan (Forest Plan) desired conditions and direction for scenery resources.

The primary purpose of this section is to disclose the effects of the alternatives to scenery resources.

**Regulatory Framework**. The National Environmental Policy Act of 1969 (NEPA) states that it is the "continuing responsibility of the Federal Government to use all practicable means to assure for all Americans, aesthetically and culturally pleasing surroundings." NEPA also requires "A systematic and interdisciplinary approach which would insure the integrated use of the natural and social sciences and the environmental design arts into planning and decision-making which may have an impact on man's environment." To accomplish this, numerous Federal laws require all Federal land management agencies to consider scenery and aesthetic resources in land management planning, resource planning, project design, implementation, and monitoring.

Several USDA handbooks have been developed to establish a framework for management of visual resources, including, but not limited to:

National Forest Landscape Management Volume 2, Chapter 1 the Visual Management System (Agriculture Handbook 462, USDA Forest Service 1974) and

Landscape Aesthetics, A Handbook for Scenery Management (Agriculture Handbook 701, USDA Forest Service 1995).

This evaluation applies current National Forest Scenery Management methodology in conjunction with existing Wallowa-Whitman National Forest (WWNF) Plan direction. This includes scenery sustainability concepts described in Scenery Management System (SMS) Handbook Appendix J – Recommended SMS Refinements. It relies on field studies and photography from inventoried sensitive viewpoints and other views of the project area, as well as coordination with project interdisciplinary team (ID Team) members, and consideration of public preferences for scenic quality. Cumulative scenic quality is evaluated within the geographic scope of roadways and other viewpoints within and adjacent to the project.

Integration of this scenery analysis and associated scenery project design features assures the Sheep Creek Project is consistent with scenery-related Wallowa-Whitman National Forest direction, Forest Service (FS) policies, and applicable elements of FS Visual Management and Scenery Management systems. Refer to Appendix B of the Scenery Management System Handbook #701 for a complete list of references requiring Forest Service management of scenery and aesthetics.

Within the Sheep Creek project area, the 5100 road is identified as a Sensitivity Level 2 route where management activities are normally visually subordinate, but may be evident (Partial Retention). Given this, the following visual analysis was conducted from the National Forest System Road 5100. The proposed treatments visible from the 5100 road were considered and evaluated in light of the partial retention VQO's.

## Overview of Issues Addressed

#### **Issue Indicators**

The two indicators used to measure the effects to scenery resources are scenic integrity and scenic stability. These two indicators evaluate the intensity and duration of effects as well as the degree to which the alternatives would affect the stability of scenery attributes over the long term.

*Scenic Integrity* is the degree to which the scenery is free from visible disturbances that detract from the natural and socially valued appearance, including disturbances due to human activities or extreme natural events inconsistent with the historic range of variability.

*Scenic Stability* is the degree to which the Desired Scenic Character can be sustained through time and ecological progression (Landscape Aesthetics, USDA 1995).

## Affected Environment

## **Existing Condition**

## **Existing Scenic Integrity**

Scenic Integrity is measured on the Wallowa-Whitman National Forest through Visual Quality Objective levels defined by the FS Visual Management System's Chapter 1 USDA Handbook # 462. These levels and descriptors of how people perceive them are shown below.

Table 2. Visual Quality Objectives and Perceived Alteration

Visual Quality Objectives	Scenic Integrity as people perceive it		
Preservation	Unaltered , visually complete or intact		
Retention	Unnoticeably altered		
Partial Retention	Slightly altered		
Modification	Moderately altered		
Maximum Modification	Heavily altered		
Unacceptable Modification	Unacceptably altered		

The existing scenic integrity meets the visual quality objective of the Forest Plan. Within the project area there are evidences of past activities. Shelterwoods are apparent within areas of modification. Partial removal treatments can be seen in partial retention areas where stumps are apparent and trees typically less dense with boles of large trees more visible. Along with the evidences of treatments are the indirect effects of additional variety in color and texture of understory vegetation as deciduous shrubs and larch species respond to more open canopy conditions. There are also large areas of natural appearing landscapes along with middleground and background views with widespread evidence of human's activities in this project area.

## **Sensitive Viewsheds**

National Forest System Road 5100 from Vey Meadows to the North Fork John Day Campground has a visual sensitivity rating of 2. Along Sensitivity Level 2 routes, management activities are normally visually subordinate, but management activities may be evident (Partial Retention).

## **Existing Scenic Stability**

Scenery indicators have been developed for use within the FS Scenery Management System (applied in this analysis according to procedures described in the 2007 Recommended Scenery Refinements, Appendix J of the SMS Handbook #701.

For the Sheep Creek project area, the existing Scenic Stability analysis focuses on the single major scenery attribute of vegetation, addressing its ecosystem conditions and stresses identified by field observation and Fire Regime Condition Class (FRCC) coarse-scale data on vegetation and fire history data (Fire Regime Condition Class, Sciarrino, 2003).

Scenic stability levels are defined as follows:

## Scenic Stability Level Definitions

**Very High Stability**—All dominant and minor scenery attributes of the valued scenic character are present and are likely to be sustained.

**High Stability**—All dominant scenery attributes of the valued scenic character are present and are likely to be sustained. However, there may be scenery attribute conditions and ecosystem stressors that present a low risk to the sustainability of the dominant scenery attributes.

**Moderate Stability**—Most dominant scenery attributes of the valued scenic character are present and are likely to be sustained. A few may have been lost or are in serious decline.

**Low Stability**—Some dominant scenery attributes of the valued scenic character are present and are likely to be sustained. Known scenery attribute conditions and ecosystem stressors may seriously threaten or have already eliminated the others.

**Very Low Stability**—Most dominant scenery attributes of the valued scenic character are seriously threatened or absent due to their conditions and ecosystem stressors and are not likely to be sustained. The few that remain may be moderately threatened but are likely to be sustained.

**No Stability**—All dominant scenery attributes of the valued scenic character are absent or seriously threatened by their conditions and ecosystem stressors. None are likely to be sustained, except relatively permanent attributes such as landforms (SMS Handbook, Appendix J – Recommended SMS Refinements, 2007).

Ecosystem Risk To dominant scenic attributes	Stability of the dominant scenic attributes	Scenic Stability Level
LOW Risk to ALL (includes dominant and minor scenic attributes)	ALL are Stable	VERY HIGH STABILITY
LOW Risk to ALL	ALL are Stable	HIGH STABILITY
HIGH Risk to a FEW	MOST are Stable	MODERATE STABILITY
HIGH Risk to SOME	SOME are Stable	LOW STABILITY
HIGH Risk to MOST	FEW are Stable	VERY LOW STABILITY
HIGH Risk to ALL	NONE are Stable	NO STABILITY

- "ALL" means 90-100% of all the dominant attributes
- "MOST" means 60-90% of all the dominant attributes
- "SOME" means 40-60% of all the dominant attributes
- "FEW" means 10-40% of all the dominant attributes
- "NONE" means 0-10% of all the dominant attributes

(SMS Handbook, Appendix J – Recommended SMS Refinements, 2007, pg. 18).

## Potential Vegetation Groups, Stand Structure and Historical Range

Current trends in the species composition and stand structure pose increasing risk to scenery resources. The project area has three forested potential vegetation groups (PVGs), well described in the silvicultural section. Large portions of the project area have shifted from low or mixed intensity fire behavior to high intensity fire, resulting in low scenic stability.

## **Existing Scenic Stability Summary**

Vegetation, fuels and climate trends and conditions in the project area are resulting in increased hazard to the scenic resources. Species compositions are becoming increasingly dominated by non-fire tolerant grand fir and Lodgepole pine and an abundance of dense multi-layered stands make the area susceptible to large stand replacement fire. Given this, the existing scenic stability of the Sheep Creek area is considered very low.

#### **Desired Condition**

## **Forest Plan Direction**

Forest Goals- Landscape Management: To manage all National Forest lands to obtain the highest possible visual quality, commensurate with other appropriate public uses, cost and benefits.

## Standards and Guidelines

1. VQO's. Meet visual quality objective through management techniques described in National Forest Landscape Management, Volumes 1 and 2, and the Wallowa-Whitman National Forest Visual Management Plan (Visual Management System, 1974, Wallowa-Whitman National Forest Land and resource Management Plan, 1995).

- 2. Partial Retention Foreground and Retention Middleground. In partial retention foreground and retention middleground, the area regenerated per decade should not exceed 9 percent or be less than 5 percent of the suitable forest land within and viewshed. The maximum seen area disturbed at any one time should not exceed 14 percent of any viewshed. Limit regeneration unit size to that which meets partial retention and desired character including consideration of future entries and regrowth. The approximate range of sizes necessary to accomplish this is ½ to 2 acres in the immediate foreground (less than 500 feet) and 3 to 5 acres in the foreground greater than 500 feet from the road or trail. Target size tree in foreground is 26 inches where biologically feasible.
- 3. Partial Retention Middleground. In partial retention middleground, the area regenerated per decade should range between 8 and 10 percent. Limit maximum regeneration unit size to 10 acres. Maximum area disturbed at any one time should not exceed 20 percent.
- 4. Created Openings. Consider a created opening to no longer be an opening, visually, when trees reach 20 feet in height. Rotation periods will be sufficient to grow large tree character in viewshed foregrounds.
- 5. Resolving Conflicts. Where conflicts develop between visual quality objectives and timber or range management objectives, these conflicts will be resolved in favor of meeting the visual objectives. Where conflicts occur between old-growth objectives and visual objectives, old growth will have priority.

The Forest Service has developed the Recreation NICHE process for recreation facilities analysis. This process was developed to define the particular recreation niche the forest could provide for the public. The Forest defined spatial units that had particular characteristics which could support a defined set of recreational experiences. The WWNF conducted a recreation facilities analysis which characterized the forest and defined spaces in terms of use and sense of place.

The project area lies within the Blue Mountains of the Wallowa-Whitman NF (W-W). The characterization of this area is as follows:

## W-W Niche Statement

A Forest's recreational program niche is reflective of its "defining or unique characteristics and abilities". For the Wallowa-Whitman National Forest, this niche spans 2.3 million acres from the central Blue and Wallowa Mountains in northeast Oregon across the Snake River into the Seven Devils Mountains in western Idaho. These diverse landscapes distinguish the Forest's 3 main areas, Hells Canyon, the Wallowa Mountains, and the Blue Mountains. Visitors and local residents return to the Forest each year to enjoy a unique blend of: outstanding rugged scenery, backcountry and wilderness exploration; a variety of wild and scenic rivers and mountain lakes; and Native American and pioneer history.

## **Desired Scenic Character**

**Broad landscape-** Ponderosa pine stands have a strong visual characteristic of large trees in open park-like stands. The mixed conifer stands provide multi-layered characteristics and small openings create a mosaic across the forested landscape. These attributes create very attractive scenery. The major scenic attributes are the timbered vegetation that is diverse and viable, the streams and the riparian deciduous vegetation, and the steep mountainous terrain. The minor scenic attributes are the rock outcrop formations.

## **Scenic Character Context**

The Blue Mountains section is the western most section of the Middle Rocky Mountain Steppe. The terrain has been formed by metamorphic and volcanic activity which developed mountainous landforms. Coniferous vegetation spreads across the broad ridge tops, down the drainages and across north facing

slopes. South and west facing terrain often has open grassy slopes. Riparian vegetation along streams is primarily coniferous with minor inclusions of deciduous poplar, alder and willow along with areas of moist to wet meadows where sedges and rushes dominate the riparian vegetation. Basalt rock outcrops accentuate the steep faces of the stream corridors. Culturally, the area has been utilized by Native American tribes which utilized burning practices to improve the production of berries, big game forage, and to drive game. These fires as well as lighting caused fires thinned the non-resistant tree species from the stands, creating an open forest dominated by large ponderosa pine and western larch. Small aspen stands are found where conditions support them (Ecological Subregions of the United States: Section Descriptions, 1994).

## **Scenic Attractiveness**

"Scenic attractiveness is the primary indicator of the intrinsic scenic beauty of a landscape and of the positive response it evokes in people" (Landscape Aesthetics, USDA, 1995). Based on commonly held perceptions of the beauty of landform, vegetation pattern, composition, surface water characteristics, and land use patterns and cultural features, the scenery is rated on a three point scale:

Class A – Distinctive, where landform, vegetation patterns, water characteristics and cultural features combine to provide unusual, unique or outstanding scenic quality.

Class B – Typical, where landform, vegetation patterns, water characteristics and cultural features combine to provide ordinary or common scenic quality.

Class C – Indistinctive, where the landscape does not have characteristics that add to the variety, unity, vividness, mystery, intactness, order, harmony or uniqueness of the scenery.

The Sheep Creek project area is dominated by Class C with areas of Class B scenic attractiveness. The scenic attractiveness rating is applied to the process of evaluating the value of the area's scenery resource.

## **Landscape Visibility**

The 5100 road provides varying degrees of visibility of proposed treatment units and is assigned a sensitivity concern level of 2 in the Forest Plan (Table 4). Concern levels are the measure of the degree of public importance placed on landscapes viewed from travelways and use areas. "Levels are attributed by use levels, viewer interest in scenery and duration of view" (ibid). The sensitivity levels are used to determine the appropriate visual quality objective for areas visible from the particular road or use area.

Visibility is variable from the 5100 road. The project units located on the upper plateaus and along side drainages are less visible. Trees and other vegetation along the road limits visibility with project units seen for short durations as one traverses the road. From higher elevations such as Chicken Hill, much of the Sheep Creek area is visible from a mid to background distance.

**Table 4. Travel Route Sensitivity Levels** 

Road	Concern Level
5100 – Primary Travelway/Use Area Moderate	2 - Moderate
Rest of Project Area – Secondary Travelway/Moderate Use	2 - Moderate

## **Scenic Classes**

Scenic classes are derived from the scenic attractiveness, visibility and sensitivity levels. The scenic classes are a system of classification describing the importance or value of a particular landscape or portions of the landscape. Scenic classes range from class 1 being of very high value, to Class 7 being of low value. The forest has inventoried and classified the forestlands and assigned visual quality objectives by scenic class (Table 5).

Table 5. Scenic Class, Visual Quality Objective and Scenic Integrity Level

1	Preservation	Very High
2	Retention	High
3	Partial Retention	Moderate
4	Modification	Low
5	Maximum Modification	Very Low
6	Unacceptable Modification	Unacceptably Low

## **Scenic Stability**

Scenic stability is the degree to which the desired scenic character can be sustained through time and ecological progression. For the Sheep Creek area, the existing scenic stability analysis focuses on the single major scenery attribute of vegetation, addressing its ecosystem conditions identified by field observation and Fire Regime Condition Class (FRCC) coarse-scale data on vegetation and fire history data. Ecosystem changes to other minor scenery attributes such as landform, rock outcrops, and winter snowfall are not as critical to the Sheep Creek project area's scenic character as its vegetation, since these changes are relatively stable over time regardless of fire behavior and human activities.

Evaluating scenic stability is done by considering conditions necessary to sustain desired scenic character of stands within the natural and historic range of the landscape. Appropriate stand density, species composition, and fuel loads are necessary for stands to maintain the inherent characteristics through their lifecycle. When trends such as increasing stand density, encroachment of less resilient species, increasing fuel loads, and high levels of mortality exist, the expected consequences are change in the scenic character that are beyond the historic scale. Examples of these consequences are large canopy openings from intense wildfires, large stands of dead and dying trees, and loss of distinctive characteristic such as open, large tree character pine stands, lodgepole pine stand mosaics and multi-layered mixed species stands. Gradual trends over time have altered the species composition, stand structure, and age classes of the forest vegetation. Stands of large mature ponderosa pine that provide an open forest are diminished due to encroaching mixed conifer species, and past harvest practices that removed large overstory pine to release shade tolerant species.

Much of the coniferous vegetation is trending toward unsustainable conditions. Stocking levels, fuel loads, and species composition have departed from the reference/historic conditions. The historic fire regime of the ponderosa pine type is one of frequent low-intensity fires which have maintained lower stand densities, and fuel loads at a healthy sustainable level. This low-intensity fire regime maintains a sustainable species composition of predominantly fire-resistant ponderosa pine. These conditions are specifically rated as fire regime condition class 2 and 3 which indicate that a fire occurrence would most likely burn at higher severity and at a larger scale than historically characteristic.

These conditions are rated at very low scenic stability because known scenery attributes such as the open stands of ponderosa pine are threatened by uncharacteristic fire and insects and disease.

## **Environmental Consequences**

## Methodology

The scenery effects analyses used for this section are those found in the Scenery Management Handbook #701, Appendix J. Scenery management is based on the classic aesthetic factors of form, line, color and texture, as well as the principles of sense of place. "Scenic integrity measures the amount of natural or socially valued appearance in a landscape along with the amount of visual disturbance that contrasts with and detracts from the appearance (the valued scenic character) existing at the time of measurement." "Scenic stability is an indicator of the ecological sustainability of the scenic character's valued attributes" (Landscape Aesthetics, USDA, 1995, Appendix J, 2007).

## **Incomplete and Unavailable Information**

Information necessary for evaluating scenery effects is sufficient.

## **Spatial and Temporal Context for Effects Analysis**

The effects to the scenery resources can be short term and long term. Short term effects persist less than 5 years, and long term effects range from 5 years to 50 years. Effects that are eliminated by the natural course of a single growing season are not considered effects because they are a so short lived. Most thinning treatments have long term effects while the associated logging systems such as cable yarding, skidding and slash burning are usually short-term effects lasting less than 5 years.

The scenery analysis area is the area from which the proposed treatments can be visibly discerned (foreground 0ft - 1/2 mi) within the project boundary from "seen" areas (those designated partial retention and along sensitive travel ways). Middleground within the project area is considered "seldom seen" with low concern levels.

## **Direct and Indirect Effects**

## Alternative 1 – No Action

The No Action alternative would allow existing conditions and trends to continue on their current trajectory. Although a no-action alternative would create no effects to the scenic integrity and meet all the visual quality objectives, it would leave conditions that place scenic attributes at risk.

A no action alternative would have no short-term effects to scenic integrity, or scenic stability. Existing scenery integrity and scenic stability would remain the same, and the visual quality objectives would be met.

The indirect long-term effects related to the existing conditions and trends could be substantial and long term. Overstocked stands are under increased stress likely to lead to insect and disease epidemics affecting scenic character and stability. Fuel loads within the stands increase the hazards of stand replacement fire. All of these conditions will continue to degrade the scenic stability as stands crowd out fire resistant species.

In the event of a stand replacement fire, the scenic integrity would likely be greatly reduced due to widespread tree mortality.

In addition to the loss of large stands of trees, there are also other effects such as those associated with fire suppression efforts in and around capital investments such as campground, trailheads and along roads which serve as suppression points and fire lines. Noxious weeds are often another effect after the fire event has occurred impacting visual character and stability.

## **Effects Common to all Action Alternatives**

The effects of specific prescriptions are described in this section.

## **Commercial Thinning-(HTH and RHCA - HTH)**

Thinning from below opens the stands by removing the smallest diameter trees. This provides greater viewing distances into the stand allowing for improved views of any remaining large diameter tree boles. The reduction in tree densities improves the resilience of the stands by reducing stress, and ladder fuels, reducing the risk of insect and disease epidemic occurrence, and stand replacement wildfire. This prescription also targets species that are not fire resistant, therefore further improving the resiliency of the stands. These are benefits that contribute to the improvement of scenic stability when carried out at a landscape scale.

This treatment will create stumps, slash and duff disturbance visible from foreground views. These effects will be noticeable within the first one to two years. As regrowth of shrubs and grasses occur these effects will be reduced. This prescription does not create openings that area visible from middleground or background distances. The effects of this prescription are not anticipated to reduce the scenic integrity of treated areas.

## Improvement Thinning (HIM)

This prescription removes some of the dominant and codominant trees to release the more viable adjacent and understory trees to promote stand health and more resistance to stand replacement fires and insects and disease. These treatments open up the canopy producing textural change visible from middleground views. Foreground views will be affected by stumps, slash and occasional skid trails. The resulting open canopy will allow more light to reach the forest floor, creating a dappled shadow appearance. These treatments result in short term impacts to the immediate foreground and are addressed and mitigated with project design features described in following sections.

# Group Selection Treatments: Shelterwood Establishment (HSH) and Patch Opening (HPO)

Shelterwood harvest facilitates the establishment of a new cohort of trees within diseased and compositionally departed stands. This treatment transitions Stem Exclusion and Understory Reinitiation to Stand Initiation structures with scattered large healthy and mature trees for snag recruitment and natural seed source.

Patch openings transition Stem Exclusion and Understory Reinitiation structures at high risk for mountain pine beetle mortality into Stand Initiation patches. Patches consist of irregularly shaped openings, 3-5 acres each, across 30-40% of proposed units. Treatments retain desired species (western larch, Douglas-fir and ponderosa pine) and trees suitable for snag recruitment within the openings.

This treatment mimics patch disturbances observed within mixed severity fire regimes and promotes regeneration of early seral species. Planting may occur in areas where natural regeneration of desired species is unlikely. Variable thinning in stands adjacent to patches would promote large tree development and structural diversity.

These treatments would create stumps, slash and soil disturbance that would be visible from foreground views. These effects would be minor within the first one to two years. As regrowth of shrubs and grasses occur these effects would be significantly reduced. Single tree selection would not create openings that are visible from middleground or background distances. Small openings from group selection treatments would be consistent in size and shape with historic patterns and could be visible from middleground distances.

## **Prescribed Burning**

Underburning natural fuels is a treatment used to reduce litter and ladder fuels. Effects to scenery are generally minimal and short lived. A growing season reduces the effects to the remaining scorched tree trunks, and dead saplings. This treatment most successfully conserves scenery resources when thorough site preparation is done prior to underburning. Fire, at low intensity is a natural occurrence in this area, and its effects do not degrade the scenic quality. This treatment can greatly improve a stands resiliency to large stand replacement fire which can affect the scenic quality.

## Pre-commercial Thinning (PCT), Fuels Thinning (FUH/FUM/RHCA – PDC)

This treatment reduces stocking levels to promote growth of desirable species, reduce disease, the treat of future insect outbreaks and ladder fuels that increase fire intensity and the occurrence of crown fires. Removal of these trees opens views into stands. The effects to scenery are limited to foreground view effects of stumps, and slash. See project design features for mitigation of these effects.

These treatments reduce stocking levels within young, post disturbance stands to promote growth of desirable species and increase spatial heterogeneity toward the range of variability. Direct effects to scenery would be minimal and short term. The effects to scenery are limited to the foreground view effects of stumps, and slash. This treatment can improve stand resiliency to stand replacement fire, which can affect the scenic quality.

## **Design Features and Mitigation Measures**

Effects of the action alternatives are based on the full implementation of the following mitigation measures to minimize the effects of logging activities:

- Limit naturally shaped openings to be a maximum of 5 to 10 acres in size with blended edges. In areas of Partial Retention in both Middle and Background from Forest roads 5100
- New temporary roads and landings may be evident but must remain subordinate to the shape and pattern of the natural appearing forest canopy in areas of Partial Retention foreground from Forest road 5100
- In areas of Partial Retention in both Middle and Background from Forest roads 5100 foreground clearings (not to exceed 2 acres) should not be used frequently but can be used in specific circumstances to treat insect or disease infestations, or to open views to scenic attributes such as rock formations, large ponderosa pine or components, or views to distant mountain peaks.
- Slash piles shall not be located within the immediate Foreground, (100') of Forest roads 5100
- After burning piles within landings, scatter residue of burn piles and seed area within the areas of Foreground with native species.

## Alternatives 2 and 3

## Scenic Stability

Alternatives 2 and 3 include a suite of thinning and fuels treatments designed to address the purpose and need (see prescription effects above). Treatments would improve the long-term scenic integrity by opening stands for increased visibility and visual diversity. Partial removal and commercial harvest treatments would retain the pine and larch species with large and old tree characteristics and greater fire resiliency. These treatments will improve species composition, stand density, and reduce ladder fuels and canopy closure enhancing scenic character and stability.

Both action alternatives would improve scenic stability from low to high where "all dominant scenery attributes of the valued scenic character are present and are likely to be sustained" (SMS Appendix J). Alternative 2 would increase visibility into stands in the project area by opening up the mid canopy, improving stand conditions and textural diversity on approximately 1,213 acres of stands with a VQO of partial retention, 10,640 acres of modification, and 917 acres of maximum modification. Alternative 3 would treat approximately 822 acres with a VQO of partial retention, 7,181 acres of modification, and 554 acres of maximum modification.

#### Scenic Integrity

Thinning and fuels treatment activities will cause short-term effects that reduce scenic integrity for a period of 1-3 years from ground disturbance and slash. Tractor yarding and skyline cable yarding create

visible effects for the first year including ground disturbance, slash and debris, but after a growing cycle these effects will be negligible.

There are approximately 3,116 acres of foreground within the project area that have a VQO of partial retention. Alternative 2 would treat approximately 725 acres of partial retention foreground, 0 acres of middlground, and 488 acres of background. Alternative 3 would treat approximately 653 acres of foreground, 0 acres of middleground, and 169 acres of background. No regeneration harvests are proposed, therefore both alternatives are within Forest Plan visual standards for less than 14% of the viewshed perceived as "opened" from regeneration harvest.

## **Cumulative Effects**

Alternative 1 – No Action Vegetation impacts on scenery resources will be largely dependent on future natural disturbances from fire, insects and disease and weather/climate. Continuing trends of increased understory vegetation will reduce views in and through the forest at the eye level in foreground views and thus reducing the diversity of color and texture available to viewers. With increased density of trees, increased insect and disease related mortality is likely and will affect scenic character through periods of dead and dying trees altering color and texture of views.

Within the next 20 to 30 years, 13,653 acres (46% of the project area) identified as Fire Regime Condition Class (FRCC) 2 may progress to FRCC 3 posing high risk to scenery resources during wildfire events and show continued reduction in scenic stability.

## Alternatives 2 and 3

The treatments proposed are designed to reduce ladder fuels and overall tree densities and provide greater firefighting opportunities for future wildfire events This in turn will likely indirectly affect the size and severity of future fire events reducing potential wildfire effects to scenery resources. It will be much more likely that effects of fires in this area will remain within the size and severity characteristic to the historical range once treatments are completed.

Fuel reduction units totaling approximately 400 acres (Rooster units 503, 504, 505, 506, 509, 510, 511A and 512) and commercial thinning units totaling approximately 70 acres (Rooster units 22 and 34) are adjacent to Forest Service road 5100. The views from this road are "cleaned up" and the appearance of the understory is more open. Low stumps are visible from these roads. The effects would not be apparent from a middleground or background view. The additional 725 acres of treatment in alternative 2 and 653 in alternative 3 within partial retention foreground would contribute to the mosaic of stand structures within the viewshed and complement the treatments completed under the Rooster project.

The timber sale history in this area includes sales from 1954 to 2003. Openings created during this time that have repopulated with trees taller than 20 feet are no longer considered visually open (Forest Plan 4-44). Textural differences are still evident in areas with intermixed regeneration units with unnatural shape and sized patches created by past regeneration harvests. Continued development of these patches over the next several decades will reduce textural contrasts as trees grow and structure diversifies in old regeneration units. The harvest activities since 1989 have been primarily intermediate treatments that did not create openings or negatively affect the scenic integrity. These treatments primarily addressed density and species composition in immature stands through precommercial thinning. Alternatives 2 and 3 would include treatment in many past regeneration units helping to facilitate stand development and reduce some of the textural and color contrasts on the landscape. Beyond unpredictable future wildfires, no present or reasonably foreseeable future activities which overlap in time and space with the Sheep Creek project would have a measurable effect on scenery and visual resources when combined with the activities proposed under the action alternatives in Sheep Creek (Appendix D of the EA). In the event of a future

wildfire, alternatives 2 and 3 provide greater cumulative scenic stability than alternative 1 resulting in reduced potential for negative cumulative effects to scenic integrity resulting from a wildfire.

## **Summary of Effects**

Alternative 2 would treat 4,465 more acres than Alternative 3. Deferring treatment of non-fire resilient stands would perpetuate the existing condition in these stands thus reducing the effectiveness of the treatments to improve their vegetative resiliency to disturbance factors such as fire, insects, and disease. Scenic stability is expected to improve under alternatives 2 and 3 due to increased vegetation resilience to wildfire and other disturbances. Scenic integrity will be maintained and enhanced through application of scenery project design features and improved views in to treated areas highlighting existing large trees/boles and increased understory grass, forb and shrub abundance and diversity adding to the color and textural diversity in foreground areas. The action alternatives all meet Forest Plan VQOs and objectives and standards, and all alternatives retain existing VQOs consistent with Forest Plan Standards and Guides for Scenery. The following table shows the summary and compliance of the action alternatives.

Table 1. Summary of Scenery Effects and Compliance

Alternatives	Overall Scenic Integrity	Existing Scenic Stability	Achieved Scenic Stability	Forest Plan Compliance
Alternative 2	Partial Retention	Very Low	Low	Meets Forest Plan VQOs
Alternative 3	Partial Retention	Very Low	Low	Meets Forest Plan VQOs

# Compliance with Forest Plan and Other Relevant Laws, Regulations, Policies and Plans

Alternative 1 is compliant with the Visual Quality Objectives that are Forest Plan Standards.

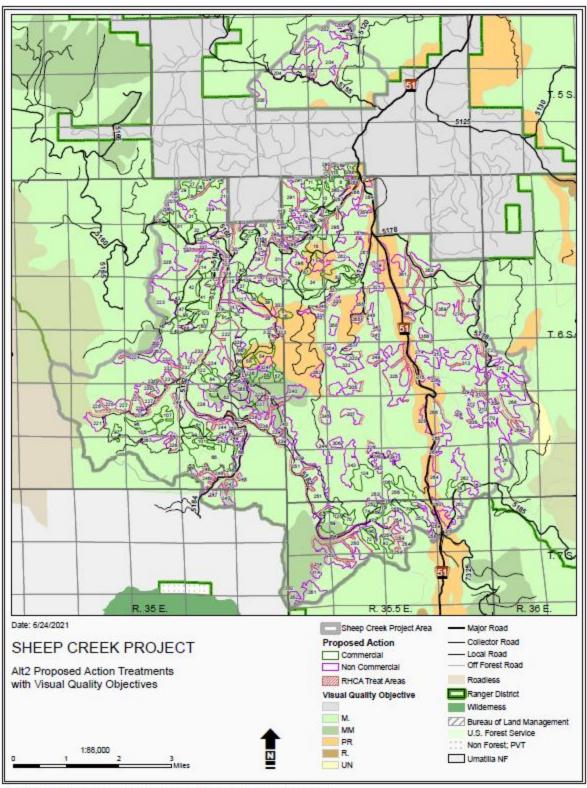
It is expected that Alternatives 2 and 3 would not reduce the scenic integrity and thus retain the existing visual quality objective standards established in the Forest Plan.

## References

USDA (1974). National Forest Landscape Management Volume 2, Chapter 2, The Visual Management System. Agricultural Handbook Number 462, USDA Forest Service.

USDA (1997). Landscape Aesthetics, Agricultural Handbook #701.

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Project	Potential	Overlap in:		Measurable	Effects
	Effects	Time	Space	Cumulative Effect?	
Noxious Weed Management W-W Invasive Species	Reduction of invasive species competition	Yes	Yes	No	
Treatment ROD	competition				
Veg Management		No	No	No	
Fuels Reduction & Rx Burning		No	No	No	
Recreation- Dispersed Camping		Yes	Yes	No	
Recreation- Snowmobile Trails		Yes	Yes	No	
Recreation -Firewood Cutting		Yes	Yes	No	
Recreation – OHV Use		Yes	Yes	No	
Roads & Trails – Travel Management Plan		Yes	Yes	No	
Road Maintenance 5100 Rd		Yes	Yes	No	
Roads - Danger Tree Removal		Yes	Yes	No	
Grazing Allotments		Yes	Yes	No	
Wildlife Enhancement  – Trail Advanced Closure Area		Yes	Yes	No	
Mining		No	No	No	No approved plans of operation
Private Land Activities  • Private Structures  • 3 Year round Residences		Yes	Yes	No	